

City of Princeton Fiber and Power Line Broadband Services

Provide affordable high speed internet service to every citizen and business in the City of Princeton

Why?

Retention of current customer base and Economic growth. Also to provide affordable high speed data services.

Electric Utility

- ◆ 4300 Electric Customers, 70% Overhead/30% Underground, 495 transformers, 7.2 customers per transformer

Fiber Network

- ◆ Completed the construction of 12 mile backbone Fiber Ring (96 fiber)
- ◆ 12 fiber count drops being ran to key locations

Public/Private Partnership

- ◆ City of Princeton and Connecting Point have established this partnership. Outlines for duties are spelled out, Protects the Electric Department and customers, Revenue sharing

How Did We Get Here?

- ◆ Incumbents were not willing to work with us
- ◆ You, the customer

Available Options

- ◆ Fiber broadband services, speeds starting of with several T-1 lines and easy to ramp the speed up
- ◆ Network systems
- ◆ VoIP, Security Systems, Energy Management system ?????

City Roles and Responsibilities

- ◆ Install/Maintain BPL system
- ◆ Provide Fiber Network
- ◆ Install and Maintain Fiber Network
- ◆ Provide customer base

Franchisee Roles and Responsibilities

- ◆ BPL Equipment, Internet Content, Customer Care & Billing, Network Management, Data for monitoring Power Outages

Benefits to Princeton

- ◆ Improving Quality of Life, Promoting Economic Development, Promoting Broadband Competition, Retaining customer base, Enhancing responses to Power Outages,

Why BPL/PLC

- ◆ Minimal Capital Expense to the Utility, Connections possible to almost all customers, Fast and easy to install, Reliable Internet Access, Speeds in excess of 4.0 Mbps for G2, Alarming for power outages notifications, VoIP, Security, Video

Utility Applications

- ◆ AMR, Hotspots, Traffic Controls, Outage Notifications, Potential system flaws that go unseen, Security system (Homeland Security Grants) , Energy Management Systems, Switching to provide Reliability and VoIP

System Features

- ◆ Always On, Dynamic Routing Between Concentrators, Intelligent Repetition, Bi-Directional Communications and Portability

Advantages BPL

- ◆ Monitor Electric Usage, Security, Internet Services, Voip, Video, Web Hosting, Video Games, Every Home has Electric Service

Opportunities

- ◆ Regulatory Support is high, State Support, Technology works (Plug and Play), Relatively low cost, no bundling, Broadband demand is increasing, VoIP, Value to the Grid, Video Applications

Challenges

- ◆ Examine FCC order, State Regulation, Relationship with Hams, Lack of Technical Standards, Weak Vendor Community